

**WE CLAIM:**

1. A fragment of connective tissue growth factor (CTGF) polypeptide having mitogenic activity.
2. The fragment of claim 1, comprising an amino acid sequence encoded by at least exon 4 as set forth in Figure 2.
3. The fragment of claim 1, comprising an amino acid sequence encoded by at least exon 5 as set forth in Figure 2.
4. The fragment of claim 1, comprising an amino acid sequence encoded by at least exons 4 and 5 as set forth in Figure 2.
5. A polynucleotide encoding a fragment as in claim 1.
6. An antibody that specifically binds to a CTGF fragment of Claim 1.
7. An antisense molecule that binds to a nucleic acid sequence encoding a CTGF fragment of Claim 1.
8. A method for treating a CTGF-associated disease or disorder comprising administering to a subject having or at risk of having a CTGF-associated disease or disorder, an antibody of Claim 6.
9. The method of claim 8, wherein the disease or disorder is a fibroproliferative disease/disorder.
10. The method of claim 8, wherein the disease or disorder is selected from the group consisting of kidney fibrosis, scleroderma, pulmonary fibrosis, liver fibrosis, arthritis, hypertrophic scarring, atherosclerosis, diabetic nephropathy and retinopathy, hypertension, kidney disorders, angiogenesis-related disorders, skin fibrotic disorders, and cardiovascular disorders.
11. A method for treating a CTGF-associated disease or disorder comprising administering to a subject having or at risk of having a CTGF-associated disease or disorder, an antisense molecule of Claim 7.

12. A method of identifying an agent or compound that modulates mitogenic activity of a CTGF fragment comprising:
  - contacting a cell with a test agent and with a mitogenic CTGF fragment under conditions that allow the components to interact; and
  - comparing the ability of the cell to proliferate in the presence of the agent to the ability of a cell to proliferate in the absence of the agent, wherein a difference in the proliferative ability of the cells is indicative of an agent or compound that modulates mitogenic activity of a CTGF fragment.
13. The method of claim 12, wherein the modulation is inhibition of activity.
14. The method of claim 12, wherein the modulation is stimulation of activity.